







New record of *Hypselodoris infucata* (Rüppell & Leuckart, 1830) (Mollusca, Gastropoda, Chromodorididae) in the Republic of Mauritius

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Abstract

To date, 179 species belonging to the gastropod infraclass Euthyneura are known from Mauritius. We report for the first time from Mauritius the chromodorid nudibranch, *Hypselodoris infucata* (Rüppell & Leuckart, 1830), based on 47 sites surveyed over 17 months. This species was previously known from the eastern Mediterranean Sea, Indo-Pacific Ocean, and Western Indian Ocean. We observed it in Mauritius at Bain des Dames near a shipwreck under coral rubble. Considering the small size and camouflage behavior of some nudibranch species, additional fieldwork will likely add others species unknown from the islands.

Keywords

Geographic range, islands, Western Indian Ocean, Nudibranchia, sea slug

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Introduction

The Republic of Mauritius, situated in the south-western Indian Ocean, consists of a set of islands: the main islands of Mauritius and Rodrigues and the outer islands of Agalega and St. Brandon. Possessing a long coastline of 330 km, Mauritius offers varied diving zones and habitats (Rambert 2008). In general, lagoons consist of seagrass beds and coral patches. The best developed reefs are found in Rodrigues (Bhagooli and Kaullysing 2019), but the most pristine reefs are in St. Brandon (Turner and Klaus 2005).

Studies of the malacofauna of the islands started in 1774. Research on the marine malacofauna of Mauritius, and in particular the infraclass Euthyneura, began in 1832 with expeditions and taxonomic works (Ah-Shee-Tee et al. 2019). Euthyneura is a diverse group which includes colorful sea slugs. Their non-aggressive and slow-moving nature make them highly photogenic and popular with underwater photographers (Jensen 2013). They contain a plethora of secondary metabolites and are important subjects of research (Cheney et al. 2016). Their

taxonomy has undergone major revisions, with the infra-class Opisthobranchia rejected in favour of Euthyneura (Wägele et al. 2014; Kano et al. 2016).

Both Mauritius and Reunion islands have been ranked as having the most diverse heterobranch fauna in the Western Indian Ocean, with 48 species reported (Yonow 2012). Information on the biodiversity of sea slugs of Mauritius is also available on the *South-West Indian Ocean Sea Slug Site* (http://seaslugs.free.fr/nudibranche/a_intro.htm). To date, 179 species of the infraclass marine Euthyneura are found in Mauritius, of which the order Nudibranchia is most diverse (Ah-Shee-Tee et al. 2019). We document the occurrence of one additional species in Mauritius, *Hypselodoris infucata* (Rüppell & Leuckart, 1830) (Chromodorididae), based on our recent sampling efforts.

Methods

Thirty-seven lagoons and 10 diving spots in Mauritius were surveyed over a period of 17 months (August 2018 to December 2019; Table 1). However, the newly recorded species was found only at one site, Bain des Dames, as shown in Figure 1. The rover diver and belt transect methods were conducted over reef and non-reef sites using both snorkeling and scuba diving. As marine euthyneurans are nocturnal species, both the rock turning and indirect sampling methods were used during daylight surveys (Brodie and Brodie 1995). *Hypselodoris infucata* was recorded on a dive plate, photographed *in situ* using a Canon digital camera, and finer details were observed using a USB microscope camera. The specimen was preserved in 95% ethanol for DNA extraction.

We identified our specimen of *H. infucata* using a field guide (Gosliner et al. 2018), two websites (http://seaslugs.free.fr/nudibranche/a_intro.htm; <http://www.seaslugforum.net/>), taxonomic works (Rudman 1985; Yonow 1990, 1994, 2001; Johnson and Valdés 2001; Yonow 2012; Yonow and Jensen 2018; Mehrotra et al. 2020), and the assistance of divers on social media.

Foot tissue from our specimen was used for DNA extraction using the Sokolov (2000) protocol. The 658-bp fragment of the mitochondrial cytochrome c oxidase subunit I gene (COI) was amplified following Knutson and Gosliner (2014) using the universal DNA primers LCO1490 and HCO2198 (Folmer et al. 1994). The sequences were read in both directions at Inqaba Biotechnical Industries (Pty.) Ltd. (Pretoria, South Africa), carefully checked, and transformed in *contigs* with Bioedit v. 7.2.5 (Hall 1999). The *contig* was submitted to a search for similarity in GenBank using the Blast program (Morgulis et al. 2008) and deposited in the GenBank under the accession number MZ558216. A total of 56 COI sequences were downloaded from GenBank for 48 species of the genus *Hypselodoris* Stimpson, 1855. *Phyllidia coelestis* Bergh, 1905 was used as outgroup (Table 2; Supplementary File 1). Multiple sequence alignment was performed using MAFFT v. 7 (Katoh et al. 2019) with

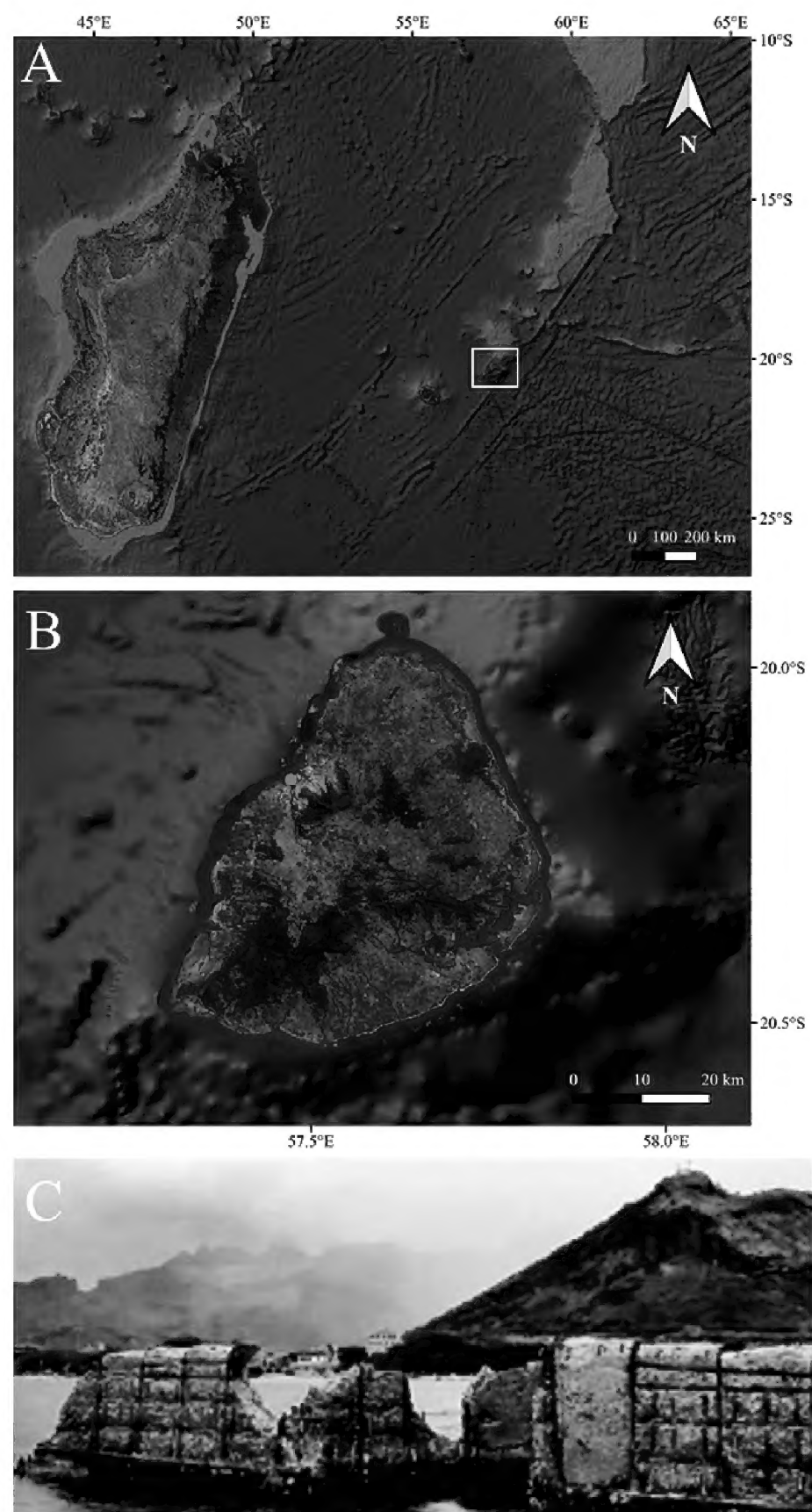


Figure 1. A. Geographical location of Mauritius in the Western Indian Ocean. B. Map of Mauritius with geographical coordinates. C. Photograph of shipwreck location. D. Photograph of shipwreck at Bain des Dames.

the alignment algorithm set to auto. Genetic distances were calculated using the uncorrected *p*-distance and the Jukes Cantor method as model of nucleotide substitution (Jukes and Cantor 1969) and built using 1000 bootstrap replicates (Felsenstein 1985) using MEGA X (Kumar et al. 2018). Phylogenetic analysis was performed using the Bayesian inference (BI) method using MrBayes v. 3. 2. 7a (Ronquist et al. 2012). The model of evolution, GTR+I+G, was selected using the Akaike information criterion implemented in JModelTest v. 2.1.1 (Darriba et al. 2012). The Markov chain Monte Carlo analysis was run with two runs of four chains for 3 million generations, with sampling every 100th generations. Convergence of the two runs was assessed by checking the standard deviation of split frequencies and the potential scale reduction factor. The effective sample sizes (ESS) were checked using Tracer v. 1.6 (Rambaut et al. 2013). Burn-in period was set to 25% prior to consensus tree construction. The

Table 1. List of sites surveyed over 17 months (August 2018 to December 2019)

No.	Location	Latitude	Longitude	Depth (m)	Dominant substrate	<i>Hypselodoris infucata</i>
1	Bain des Dames	20°09'26"S	057°28'18"E	6	Coral rubble, sand, sponges, hydroids, algae	X
2	Albion	20°12'29"S	057°24'32"E	1.5	Soft corals, coral rubble, sand	
3	Flic en Flac (FEF)	20°17'58"S	057°21'48"E	2	Corals, corals rubble, sponges	
4	Cathedral			28	Corals, corals rubble, algae, soft corals, sponges	
5	Swiss Drop			23	Corals, corals rubble, algae, soft corals, sponges	
6	Colin Bambous			34	Corals, corals rubble, algae, soft corals, sponges	
7	Tokata			25	Corals, corals rubble, algae, soft corals, sponges	
8	L'Eveillé			25	Corals, corals rubble, algae, soft corals, sponges	
9	TUG II			18	Corals, corals rubble, algae, soft corals, sponges	
10	Tamarin	20°20'16"S	057°22'30"E	1	Corals rubble, sand	
11	Martello	20°21'16"S	057°21'42"E	1	Sand, coral rubble, algae, sponges	
12	Riviere Noire	20°22'13"S	057°21'42"E	1	Coral rubble, sponges	
13	Canal Riviere Noire	20°22'21"S	057°21'13"E	25	Sponges, corals, soft corals, algae	
14	La Preneuse	20°21'16"S	057°22'25"E	1	Corals rubble, sand, algae	
15	Pointe Koenig	20°22'18"S	057°21'36"E	3	Coral rubble, sand	
16	La Gulette	20°25'43"S	057°21'36"E	1	Coral rubble, sand	
17	Le Morne	20°26'42"S	057°19'42"E	1	Corals, corals rubble, sponges, seaweed, algae, sand	
18	Ile aux Benitiers	20°25'01"S	057°20'43"E	1	Corals rubble, sand	
19	Baie du Cap	20°29'11"S	057°22'42"E	1	Algae, coral rubble	
20	La Prairie	20°28'57"S	057°21'11"E	1	Algae, sand	
21	Maconde	20°29'35"S	057°22'47"E	1	Algae, sand	
22	Bel Ombre	20°30'03"S	057°25'33"E	1	Soft corals, corals, coral rubble, anemones, sponges	
23	Le Bouchon	20°28'00"S	057°40'53"E	1	Algae	
24	Blue Bay	20°26'31"S	057°43'08"E	2	Corals, algae	
25	Pointe d'Esny	20°25'47"S	057°43'36"E	1	Soft corals	
26	Bambous Virieux	20°20'38"S	057°45'49"E	2	Soft corals, corals, hydroids, sponges	
27	Nearby Pointe Jerome	20°24'58"S	057°43'11"E	2	Sand, algae	
28	Nearby Ile aux Aigrette	20°25'16"S	057°44'12"E	2	Corals rubble, sand, algae	
29	Nearby Ilot des Deux Cocos	20°26'55"S	057°42'43"E	2	Corals rubble, sand, algae	
30	Mahebourg	20°24'21"S	057°42'12"E	1	Corals rubble, sand	
31	Mouchoir rouge	20°24'19"S	057°42'43"E	5	Seaweed and algae	
32	Belle Mare	20°11'58"S	057°46'37"E	1	Patches of corals	
33	Poste Lafayette	20°07'44"S	057°45'19"E	1	Algae, sand	
34	Grand Gaube	20°00'51"S	057°40'09"E	1	Corals rubble, sand	
35	Ile Ambre	20°02'00"S	057°41'42"E	1	Soft corals, sand and sponges	
36	Roche Noire	20°06'36"S	057°43'33"E	1	Corals rubble, sand, algae	
37	Ilot Bernache	20°01'26"S	057°42'05"E	1	Soft corals and sponges	
38	Pereybere	19°59'56"S	057°35'19"E	2	Corals rubble, sand	
39	Trou aux Biches	20°02'06"S	057°32'42"E		Corals rubble, sand	
40	Balaclava	20°04'58"S	057°30'59"E	2	Corals, corals rubble	
41	Aquarium Balaclava			15	Corals, corals rubble, sponges	
42	Baie du Tombeau	20°07'29"S	057°30'08"E	1	Corals rubble, sand	
43	Nearby le Goulet	20°06'11"S	057°30'57"E	1	Corals rubble, sand	
44	Baladirou	19°40'33"S	063°27'29"E	1	Corals, corals rubble, sand, algae, sponges	
45	Anse aux Anglais	19°40'32"S	063°26'07"E	1	Sand, algae	
46	Anse Ally	19°41'39"S	063°29'52"E	1	Seaweed, algae, corals rubble, sponges	
47	Petite Butte	19°45'12"S	063°23'35"E	1	Sand and coral rubble	

phylogenetic tree generated was viewed using FigTree v. 1. 4. 2 (Rambaut 2014). Posterior probabilities greater or equal to 0.95 were considered as strong support, 0.90–0.94 considered as weakly supported and values between 0.50 and 0.89 were regarded as unsupported (Photikwan et al. 2021). Nomenclature was confirmed using the classification of Bouchet et al. (2017) and the World Register of Marine Species (WoRMS 2021) online database. The specimen of *H. infucata* was stored in the zoology laboratory of the University of Mauritius in 95% ethanol

under the code UOMLA04 whereby the first three letters correspond to the University of Mauritius (UOM) followed by the collector Lisa Ah Shee Tee (LA) and the number of individuals collected, 4 specimens.

Results

Order Nudibranchia Cuvier, 1817
Family Chromodorididae Bergh, 1891
Genus *Hypselodoris* Stimpson, 1855

Table 2. COI data of *Hypselodoris* species (Chromodorididae) and *Phyllidia coelestis* Bergh, 1905 (Phyllidiidae) used in the present study, including localities and GenBank accession numbers.

Species	Locality	GenBank accession no.
<i>Hypselodoris alburduqali</i> Gosliner & R. F. Johnson, 2018	Saudi Arabia	MG645554
<i>Hypselodoris apolegma</i> (Yonow, 2001)	Japan: Okinawa, Ryukyu Islands, Onna Village	JQ727886
<i>Hypselodoris bennetti</i> (Angas, 1864)	Australia: Wilsons Prom, VIC	EF535131
<i>Hypselodoris bertschi</i> Gosliner & R. F. Johnson, 1999	USA: Hawaii	MG645601
<i>Hypselodoris bollandi</i> Gosliner & R. F. Johnson, 1999	Philippines: Batangas, Maricaban Island	JQ727887
<i>Hypselodoris brycei</i> Gosliner & R. F. Johnson, 2018	Australia: Western Australia	MG645567
<i>Hypselodoris bullocki</i> (Collingwood, 1881)	Philippines: Batangas Region, Maricaban Island	EU982743
<i>Hypselodoris capensis</i> (Barnard, 1927)	South Africa: Eastern Cape Province	MG645573
<i>Hypselodoris carnea</i> (Bergh, 1889)	Madagascar: South Madagascar, Cap Ranavalona fond rocheux	MG645574
<i>Hypselodoris</i> cf. <i>carnea</i>	—	EU512161
<i>Hypselodoris cerisae</i> Gosliner & R. F. Johnson, 2018	Taiwan: Taipei County, Long Dong	MG645586
<i>Hypselodoris confetti</i> Gosliner & R. F. Johnson, 2018	Papua New Guinea	MG645577
<i>Hypselodoris decorata</i> (Risbec, 1928)	Papua New Guinea	MG645576
<i>Hypselodoris emma</i> Rudman, 1977	Madagascar: Iles de Radama	JQ727890
<i>Hypselodoris ghardaqana</i> (Gohar & Aboul-Ela, 1957)	Saudi Arabia: West Manghar Island	MG645578
<i>Hypselodoris godeffroyana</i> (Bergh, 1877)	—	EU512124
<i>Hypselodoris iba</i> Gosliner & R. F. Johnson, 2018	Philippines: Batangas Province, Aphol's Point	MG645563
<i>Hypselodoris imperialis</i> (Pease, 1860)	USA: Hawaii, Maui	JQ727911
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	Australia, NSW	FJ917484
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	USA: Hawaii, Oahu, Kaneohe Bay, Coconut Island	MW278355
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	USA: Hawaii, Oahu, Kaneohe Bay, NW of Ahu'olaki Island	MW277921
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	USA: Hawaii, Oahu, Kaneohe Bay, Coconut Island	MW277885
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	Iran	KF250386
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	Madagascar: Iles de Radama	JQ727891
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	Mauritius	MZ558216
<i>Hypselodoris infucata</i> (Rüppell & Leuckart, 1830)	Philippines: Mabini, Mainit bubbles	MG645579
<i>Hypselodoris jacksoni</i> N. G. Wilson & Willan, 2007	Australia: Queensland, Mooloolaba	JQ727893
<i>Hypselodoris kaname</i> Baba, 1994	Philippines	MG645582
<i>Hypselodoris katherinae</i> Gosliner & R. F. Johnson, 2018	Philippines: Mabini, Mainit bubbles	MG645584
<i>Hypselodoris krakatoa</i> Gosliner & R. F. Johnson, 1999	Philippines	MG645587
<i>Hypselodoris lacuna</i> Gosliner & R. F. Johnson, 2018	Philippines: Batangas Province, Maricaban Island, Bethlehem	MG645588
<i>Hypselodoris maculosa</i> (Pease, 1871)	Madagascar: Iles de Radama, Nosi Valiha	JQ727895
<i>Hypselodoris</i> cf. <i>maculosa</i>	Madagascar: Iles de Radama	JQ727896
<i>Hypselodoris maridadilus</i> Rudman, 1977	Philippines	MG645590
<i>Hypselodoris maritima</i> (Baba, 1949)	Australia: Queensland, Mooloolaba	JQ727897
<i>Hypselodoris melanesica</i> Gosliner & R. F. Johnson, 2018	Papua New Guinea	MG645594
<i>Hypselodoris nigrolineata</i> (Eliot, 1904)	Madagascar: South Madagascar	MG645596
<i>Hypselodoris</i> cf. <i>nigrolineata</i>	Australia: Western Australia, Dampier	JQ727899
<i>Hypselodoris obscura</i> (Stimpson, 1855)	Australia: Queensland, Mooloolaba	EU982745
<i>Hypselodoris paradisa</i> Gosliner & R. F. Johnson, 2018	Papua New Guinea: Madang Province	MG645599
<i>Hypselodoris paulinae</i> Gosliner & R. F. Johnson, 1999	USA: Hawaii, Maui, Molokini	EU982746
<i>Hypselodoris perii</i> Gosliner & R. F. Johnson, 2018	Philippines: Mabini, Mainit Bubbles	MG645602
<i>Hypselodoris purpureomaculosa</i> Hamatani, 1995	Philippines: Batangas, Caban Island	JQ727900
<i>Hypselodoris regina</i> Ev. Marcus & Er. Marcus, 1970	South Africa: Natal, Aiiwal Shoals	MG645604
<i>Hypselodoris reidi</i> Gosliner & R. F. Johnson, 1999	Philippines: Batangas, Balayan Bay	JQ727901
<i>Hypselodoris roo</i> Gosliner & R. F. Johnson, 2018	Philippines	MG645609
<i>Hypselodoris rositai</i> Gosliner & R. F. Johnson, 2018	Philippines	MG645610
<i>Hypselodoris rudmani</i> Gosliner & R. F. Johnson, 1999	Madagascar: South Madagascar, Pointe Evatra	MG645611
<i>Hypselodoris saintvincentius</i> Burn, 1962	—	EU512162
<i>Hypselodoris skyleri</i> Gosliner & R. F. Johnson, 2018	Philippines: Sea Pens dive site	MG645580
<i>Hypselodoris tryoni</i> (Garrett, 1873)	Philippines: Batangas Province, Maricaban Island, Sepok Wall	MG645615
<i>Hypselodoris variobranchia</i> Gosliner & R. F. Johnson, 2018	Philippines	MG645618
<i>Hypselodoris violacea</i> Gosliner & R. F. Johnson, 2018	Philippines: Magic Reef	MG645619
<i>Hypselodoris whitei</i> (A. Adams & Reeve, 1850)	Australia: Queensland, Mooloolaba	JQ727903
<i>Hypselodoris zephyra</i> Gosliner & R. F. Johnson, 1999	Madagascar: Iles de Radama, Nosy Faly	JQ727905
<i>Phyllidia coelestis</i> Bergh, 1905	Indonesia	MN234119

Hypselodoris infucata (Rüppell & Leuckart, 1830)

Figure 2

New records. MAURITIUS – **Port Louis District** • Bain des Dames, nearby a shipwreck; 20°09'26"S, 057°28'18"E; 6 m depth; 13.XI.2020; Lisa Ah-Shee-Tee, Eric Le Court de Billot leg.; 4 specimens, 45 mm (UOMLA04; GenBank MZ558216).

Identification. The living animal has an elongate body and is greenish blue with patches of creamy white and dusky grey laterally. The entire dorsum has scattered and variously sized yellow, dark blue, and black spotting, with the yellow spots larger than the black ones. The perfoliate rhinophores are white with 14 red lamellae. The gill consists of 11 white unipinnate branchial leaves, with a red line along the internal and external edge (Fig. 2).

Distribution. This species has a broad distribution in the Indo-west and central Pacific oceans. It is a Lessepsian migrant which has been observed from the Eastern Mediterranean coasts of Turkey (Çevik and Öztürk 2001; Gosliner et al. 2008). It has also been reported from Hawaii (Gosliner and Johnson 1999; Gosliner et al. 2008), Guam (Carlson and Hoff 2003), Japan (Gosliner and Johnson 1999; Gosliner et al. 2008), Philippines (Debelius 1996), Indonesia (Gosliner et al. 2008), Papua New Guinea (Gosliner et al. 2008), Australia (Debelius 1996), New Caledonia, Fiji (Barash and Danin 1992),

Malaysia (Gosliner and Johnson 1999), Thailand (Mehrotra et al. 2021), India (Apte 2009), Pakistan (Gul 2019), Larak and Lavan islands, Iran (Rezai et al. 2016), Kuwait (Nithyanandan et al. 2021), Oman (Debelius 1996), Egypt (Johnson and Valdés 2001), Red Sea, East Africa (Barash and Danin 1992; Gosliner et al. 2008), Tanzania (Edmunds 1971), Mozambique (Tibiriçá et al. 2017), South Africa (Debelius 1996), Madagascar (Gosliner et al. 2008), and Mauritius (this study)

Remarks. We found a group of four individuals of *H. infucata* crawling on sand during a daylight survey near a shipwreck at Bain des Dames (Fig. 2).

Compared to other sequences of *H. infucata* from GenBank, our specimen was most similar to samples from Madagascar, reporting a genetic distance of 0.457% (Table 3, Fig. 3).

Discussion

We add a novel record of a marine heterobranch sea slug, which increases the knowledge of the marine malacofauna biodiversity of Mauritius. *Hypselodoris infucata* is widely distributed in the Indo-West, Central Pacific and the Mediterranean Sea (Çevik and Öztürk 2001; Gosliner et al. 2018; Nithyanandan et al. 2021). While it has been previously been reported from Tanzania, Mozambique, South Africa, and Madagascar, it has not



Figure 2. *Hypselodoris infucata* (Rüppell & Leuckart, 1830) crawling on sand.

Table 3. Genetic distance (in %) for *Hypselodoris infucata* (Chromodorididae) using the uncorrected *p*-distance and the Jukes Cantor method as model of nucleotide substitution and 1000 bootstrap replicates. Localities include Mad (Madagascar), Mau (Mauritius), Philipp (Philippines), Hawaii CI (Hawaii Coconut Island), Hawaii AI (Hawaii Ahuolaki Island) and Aus (Australia).

Species localities	Mad	Mau	Philipp	Hawaii CI	Hawaii CI	Hawaii AI	Aus
Mad							
Mau	0.457						
Philipp	1.076	0.922					
Hawaii CI	1.226	1.071	0.153				
Hawaii CI	1.071	0.917	0.000	0.152			
Hawaii AI	1.380	0.917	0.306	0.457	0.306		
Aus	1.076	1.533	1.019	1.190	1.019	1.361	

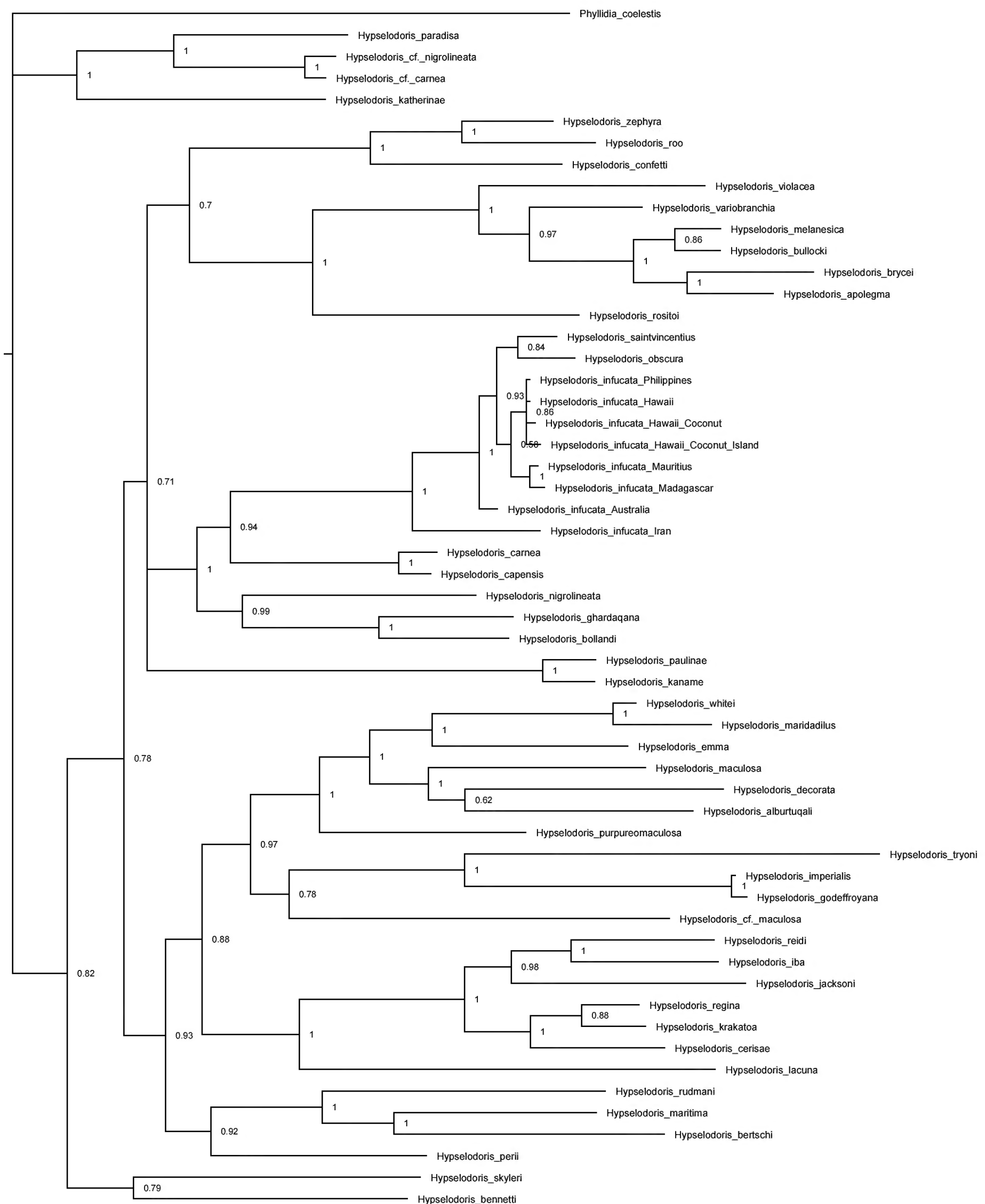


Figure 3. Bayesian consensus tree for the species *Hypselodoris infucata*, using the universal mitochondrial COI gene.

been known from Mauritius until now. Our new record expands the geographic range of *H. infucata* by about 1,130 km from the nearest previously known record in Madagascar (Gosliner et al. 2008). A COI sequence of a specimen of *H. infucata* from Madagascar (Table 2) was found to be closely related to our material from Mauritius Island, with a genetic distance of 0.457% between them. Our phylogenetic tree (Fig. 3) groups *H. infucata* from Mauritius and Madagascar as sister clades, supported by a strong posterior probability of 1 (Fig. 3). The

short distance between Madagascar and Mauritius and sea currents possibly enables gene flow by the transport of larvae. Additionally, our phylogenetic analysis also confirms the close relationships between *H. infucata*, *H. obscura* (Stimpson, 1855), *H. capensis* (Barnard, 1927), *H. carnea* (Bergh, 1889), *H. nigrolineata* (Eliot, 1904), *H. ghardaqana* (Gohar & Aboul-Ela, 1957), and *H. bollandi* Gosliner & R.F. Johnson, 1999; these species grouped together in a large clade supported by a strong posterior probability of 1 (Fig. 3). However, more genes

are necessary to more fully reassess the relationship of these species.

We found *H. infucata* near a shipwreck, where it was under coral rubble, which demonstrates the nocturnal behavior of this species. This also illustrates the diverse habitats provided by old shipwrecks (Zintzen 2007). Sunken ships are known to increase the structural complexity of seabed and potentially increase biodiversity of an area (Badalamenti et al. 2002; Knott et al. 2004). *Hypselodoris infucata* was frequently observed in pairs and recorded alongside other heterobranch sea slugs.

The genus *Hypselodoris* is one of the most diverse lineages within the Chromodorididae, with its possible origin in the Coral Triangle (Epstein et al. 2019). Aside from our observation of *H. infucata*, Mauritian waters harbor nine other species of *Hypselodoris*: *H. bull-ockii* (Collingwood, 1881), *H. carnea* (Bergh, 1889), *H. maculosa* (Pease, 1871), *H. maridadilus* Rudman, 1977, *H. nigrolineata* (Eliot, 1904), *H. nigrostriata* (Eliot, 1904), *H. pulchella* (Rüppell & Leuckart, 1830), *H. rosans* (Bergh, 1889) and *H. whitei* (A. Adams & Reeve, 1850) (Ah-Shee-Tee et al. 2019). Among the nine species, *H. pulchella* is frequently encountered in pairs in depths of 1 m. Within the sub-order Doridina, the Chromodorididae is the most diverse family, with 35 species reported in Mauritius (Ah-Shee-Tee et al. 2019). Epstein et al. (2019) described 17 new species of *Hypselodoris* which are the result of expanded investigation of the western Pacific and underexplored areas of the Indian Ocean.

The marine ecosystems are still incompletely inventoried. Ah-Shee-Tee et al. (2019) denoted 105 nudibranch species in the waters of Mauritius, based largely on internet records and systematic works. Observation of species by divers are communicated on the *South-West Indian Ocean Sea Slug Site* where photographs and information on substrates, abundances, and body sizes are provided. This adds to the knowledge of sea slug distribution in the Republic of Mauritius. Considering the small size and camouflage of some species of nudibranchs, additional fieldwork and information furnished by citizen scientists will certainly add to the knowledge of nudibranch distribution and diversity from the islands.

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Authors' Contributions

Data curation: LAST. Writing of original draft: LAST.

Supervision: DP, CA, VB. Review and editing of draft: DP, CA, VB.

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Supplemental Files

Supplemental File 1. DNA sequence of *Hypseldoris infucata*, amplified using the universal primer (Folmer et al. 1994) and uploaded to GenBank (accession no. MZ558216).